THE TENNESSEE FARMER.

How much more delightful to an undebauched mind is the task of making improvements on the earth, than all the vain glory which can be acquired from ravaging it, by the most uninterrupted career of conquests."—WASHINGTON.

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TERMS.

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Communications.

For the Tennessee Farmer.

CLINTON COLLEGE Ten. May 2d 1838.

Mr. Editor:—I noticed, in the last number of the Farmer, an extract from the Franklin Farmer, in which the writer (a Kentuckian) gives an instance of improved turnips, by letting those for seed remain in the patch covered up during the winter. He also speaks of frequent failures of turnips, and wants the views of others upon the subject. Supposing the writer of that article, to be a reader also of your periodical, or that the Franklin Farmer extracts from yours, I take this method of complying, in part, with the request of my brother of Kentucky. I do so the more readily because I wish to remunerate, as far as I can, the citizens of that State, for the numerous benefits I have received from many of them on the subject of Grass and Stock.

There is as much in the improvement of the breeds of Turnips, as of cattle, hogs, Horses, or sheep. My own observation and experience prove the following method very good, if not the best.

1st. *To make good turnip seed.* In November, or just when your turnips have their full growth, and before they have been frozen, pull up the largest, and smoothest, which have a round or flat shape (no matter what variety.) Trim all roots off so as to make them quite smooth. Then plant them in rich well ploughed ground, so deep as to let the tops of the bulb be just level with the surface of the ground. Now lay a large fence rail on each side of the turnip row, so as to leave a space of 12 or 15 inches between the rails. Then fill up the interval to the top of the rails with dirt; lay some straw on the dirt and boards longitudinally upon the straw. Then weight the boards down with additional dirt; Your turnips in this condition will keep well until spring. About the 15th or 20th March take off the covering till you can see the turnip tops, leaving the rails in their places, and your turnips will spring and produce an abundent crop of seed. If the spring is dry, water the ground, and keep straw an inch or two deep on the ground about the turnips, so as to prevent parching from thirst.

2nd. *To make good turnips from good seed.* Select a piece of ground, that is rich and near your calf lot. Let your cows lie on it every night from the fall till you sow your turnips. In March break up your patch, with two strong teams, *one after the other in the same furrow.* Your ploughing should be 10 or 12 inches deep. Thus continue to plough the ground, once a month, until the 8th or 10th of July, when the ground should be ploughed twice over as before described, close, deep and fine. Now drag a heavy brush over it; lay off your lands to sow by, with a light rail or pole dragged by hand. Sow broad cast or in drills, about 15 table spoons full to the acre, and brush or roll twice over

after sowing.

3. *To prevent the fly from destroying turnips.*—About the third or fourth day after sowing, scatter two or three bushels of good wheat bran to the acre; and the fly will suck it instead of the turnip. When your turnip tops are as large as a dollar, weed them clean with a hoe, leaving the turnips about 16 inches apart. Afterwards pull with the hand, all weeds that may spring up. Let no excuse prevent all the foregoing cares, and you are sure to make good turnips, as well as to improve your race. Do not fail to sow early in July, (i. e. for the latitude of Kentucky and Tennessee.) Nothing should prevent you, unless it be too wet to plough; for draught is no excuse, as ground rightly tilled will never be too dry to propagate turnips.

I have a race of large, white, smooth turnips, which have sprung from the common size walnut turnips of the country, by the foregoing treatment. The race has been thus managed by an uncle of mine, my father and myself, for about 25 years. From it we raise from 5 to 700 bushels to the acre, some of which measure from 8 to 11 inches in diameter. They are always sweet and fine flavored, in consequeece of the ground being well broken, so as to prevent their suffering from draught. Respectfully,

F. H. GORDON.

TOULON, May 2nd, 1838.

Mr. Editor:—I am awaiting with much anxiety the developements of your correspondent "Cincinnatus." We agree thus far, that Cotton and Tobacco should be lowered in the scale of Tennessee Agriculture, but in avoiding Charybdis, let us not run upon Scylla.

I would suggest to Cincinnatus, as well as other correspondents, that they would be particular in stating their *premises*, (soil, location, market, &c. &c.,) before they draw their conclusions.

Many persons desirous of improvement, read glowing descriptions of such and such advantages, in this or that mode of culture and management, thus stimulated they proceed to operate without due regard to the premises and failing in their anticipations, pronounce all experiments, delusions—and all innovations, as injurious.

I really believe this, one great cause, of the present state of Agricultural depression.

Though the cheapness of land and the high price of labor, in many parts of the W. District, should, (in my opinion,) be great inducements for the planters in this section, to abandon the cotton crop, still I am aware of the great difficulty of attaining this object, except, by a very gradual process. The emigrant, in order to make necessary support, and to restore, in part, his heavy expenses in removal and settlement, is compelled to make the most he can from his small portion of gradually improved land. Cotton and corn are consequently resorted to, and must be adhered to, until he has time to open his plantation and introduce a different system.

Nor should we forget, that where *labor* is *high* and *land low*, we should make the most of *land*; and, when *land* is *high* and *labor low* we should make the most of *labor*, and in this, consists the great advantage of introducing grain, stock, grass, &c., in our section, so soon as we can prepare our lands for it.

A hand on a cotton plantation will manage 10 acres, (including corn, &c.,) with ordinary labor. The same hand, on a grain and stock growing farm, will manage (I am told) from 80 to 100 acres of improved land, (including meadows, pastures, &c.) Thus we see the great advantage the stock farm has over the cotton plantation, when land is cheap. A hand in one instance, bringing into active use and profit about 10 acres of land, in the other from 80 to 100, with the greater opportunity of *increased improvement.*

These are my views, and I am trying to follow them out as fast as possible, and would thank Cincinnatus to inform us, what proportion of such any such grain, grass, &c. would be adapted to labor, to the best advantage.

I am satisfied of one thing, that cotton and

improvement to any considerable degree, are *incompatible*. I have therefore the present year, reduced my cotton crop from about 100 acres, to about 70, and hope to reduce it still more, if grain, stock, &c. will do well.

I perceive you are very partial to the root crop. I do not think that in this section, we are prepared to introduce that system of culture, nor do I suppose any part of the State is prepared, except, in the vicinity of large towns. The gathering and preservation of roots, would (it appears to me), require too much labor.

In the present system of culture with us (cotton, corn, &c.) I would as soon cultivate a crop as secure it, what then could we do with roots?

I should like to procure a small portion of the "Indian Wheat," treated of in the last Farmer. Could not the depots or agencies be so arranged as to enable us to procure a few seeds of the improved varieties of grain, grass, &c? I have the Herds, Timothy, Gama, Clover, &c., a small parcel of the "Peruvian Oat," or the "Highland meadow Oat" of Col. Taylor,* sent to me last fall from Virginia. Excuse this intrusion, and believe, me very truly, H. J. A.

To drive bugs from vines.

The ravages of the yellow striped bug on cucumbers and melons may be effectually prevented by sifting charcoal dust over the plants. If repeated two or three times, the plants will be entirely free from annoyance. There is in charcoal some property so obnoxious to these troublesome insects, that they fly from it the instant it is applied.

Ring Bone and Spavin. *Mr. Fessenden*—I know from *actual experiment* that the following recipe will cure Ring Bone and Spavin in Horses.

Take 6 oz. of the oil of Origanum—2 oz. Camphor, and 2 oz. of Mercurial ointment; mix them well together and rub the place affected two or three times a day keeping the horse dry.

New York, Oct, 1830. A. D.

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*The author of Arator.

Pasture. An English writer recommends to mix a few sheep and one or two colts in each pasture for horned cattle. Another says "the following economical experiment is well known to the Dutch, that when eight cows have been in a pasture, and can no longer obtain nourishment, two horses will do very well there for some days, and when nothing is left for the horses, four sheep will live upon it; this not only proceeds from their differing in their choice of plants, but from the formation of their mouths, which are not equally adapted to lay hold of the grass. New grass, stocked very hard with sheep will unite and mat at the bottom, and form a tender and inviting herbage. In North Wiltshire, (famous for cheese) some darymen mix sheep with the cows, to prevent the pasture from becoming too luxuriant, in the proportion of about one sheep to a cow.

"The bottom of an old hay stack is estimated an excellent manure for pasture land, as besides the nourishment it affords, it contains a quantity of grass seeds, which furnishes a new set of plants. It should never be suffered to mix with manure for grain or corn lands, as it will cause them to be overrun with grass and other plants, which though useful in a pasture, are weeds in arable land."

An accomplished Financier.—The following is one of the best things we have seen for a long spell. The wag who managed so well to create funds to pay for a bottle of whiskey, deserves to be made a Bank President.

A wag entered a store and called for a pound of cheese and a pint of whiskey, each costing ten cents. When about to go out, he returned the cheese, and the grocer asked for payment for the pint of whiskey. "I return you the pound of cheese to pay for that." "But," said the grocer, "you never paid for the pound of cheese." The wag replied, "why should I? I have returned it to you."—The grocer was confounded, and the wag walked off with his whiskey.

The water of potatoe blossoms cleans cloth, of cotton wool and silk, and assists in the manufacture of artificial soda.

This world is a field sowed for another life.

He who receives a good turn should never forget it; he who does one should never remember it. [Charron.

From the Franklin Farmer.

THE PRINCIPLES OF BREEDING CATTLE.

No. 2.—*The comparative influence of the Sire and Dam.*

If the preceeding number established the principle that *like produces like*, it is obvious that the farmer who has a good stock of cattle to breed from will rear good stock, and will improve them; but if he has a bad stock to start from, the produce will be indifferent, and will grow worse. How obviously important is it then that his stock, both male and female, should be of the best quality which he can possibly obtain.

"The question as to the comparative influence of the sire and dam is a difficult one to decide. That farmer will not err who applies the grand principle of breeding equally to them both. In the present system of breeding, most importance, (and that very justly,) is attributed to the male. He is the more important animal on account of the more numerous progeny that is to spring from him, and thus his greater general influence; and therefore superior care should be bestowed on the first selection of him for rearing. He should, if possible, always be in point of blood, of a superior degree to the stock to which he is to be bred; and besides, the farmer should study him closely, and be assured that he possesses, in more than an usual degree, the characteristic excellencies of the breed which it is wished to impart to his stock.

When this case, as to the possession of such combination of good points has extended from sire to son through several successive generations, it may readily be supposed that he will possess them in a higher degree than the female can. They will be made, as it were, a part and portion of his constitution, and he will acquire the power, of more certainly, and to a greater extent, communicating them to his offspring.

In this way the influence of the sire, may in well bred animals, be considered as superior to that of the female; but her's is always great, and must not be forgotten. In Arabia where the mare is the object of chief attention, and her good qualities are carefully studied and systemmatically bred in her, the influence of the female decidedly preponderates; and on the same principle that of the highly bred cow will preponderate over that of the half bred bull. Her excellencies are an hereditary and essential part of her, and more likely to be communicated to her offspring, than those which have been only lately and accidentally acquired by the bull with no pedigree, or with many a bolt in it. Custom and convenience however induce the generality of breeders to look most to the male.

The question whether the sire or dam has the more influence in controlling the sex of the offspring, is perhaps not less difficult of decision. Cows generally breed males and females alternately; but their habit in this particular is not so uniform as to contravene a principle which has lately been promulgated chiefly by French writers on breeding. One of them mentions a great number of cases which establish satisfactorily the principle, that *the animal which is in the greatest vigor*, (health, age, constitution and flesh being considered,) *at the time of commerce* will generally fashion the sex. For example, an old and declining cow is bred to a young and vigorous bull, other things being equal, the produce will be male, because the bull was in the greatest vigor.

These principles lead to the statement of another, which is equally as important and if possible better established, and perhaps less understood. If a man has a superior milch cow and wishes to raise milking stock from her; the common plan is to save her heifer calves. But according to a principle of breeding, sustained by facts as well as theory, by far the better plan would be, to save a bull calf from this cow, and his stock when he is put to breeding will have the excellent quality of his dam, and be, like her, superior milkers. For example, Cleopatra was an extraordinary milker, according to this principle her heifer calves may, or may not, make good milkers, but her bull calf Frederick, having her charter and qualities bred in him will communicate them to his stock, and his heifer calves will be, like his dam, superior milkers.

This last principle suggests an important consideration in selecting a breeding bull, viz: that he be descended from a superior milch cow.

The next number will contain a few remarks on the principle of breeding in and in.

R. W. S.

From the same.

THE PRINCIPLES OF BREEDING CATTLE.

No. 3.—*Breeding in and in.*

The judicious breeder will not too long confine himself to his own stock, unless it be very large. The breeding from too close affinities,—the breeding *in and in* as it is called, though it has many advantages, to a certain extent, in the hands of most skilful

and judicious breeders; though it may be pursued until the excellent form and quality of a breed is developed and established, and was the source whence sprung the superior cattle and sheep of Bakewell, and to some extent of the superior Short Horns of Mr. Colling; yet, to it, also must be traced the speedy degeneracy—the absolute disappearance of the New Leicester cattle, and, in the hand sofmany an agriculturist, the impairment of the constitution of the New Leicester sheep.

Bakewell was a master spirit in breeding, and it cannot be denied, produced a breed of cattle worthy the efforts of such a skilful agriculturist. The principle on which he seemed to act was novel, bold, and for a time a successful one. Some of his cattle were extraordinary illustrations of the harmlessness of such a system but he had a large stock on which to work, a veil of mystery was thrown over the most of his proceedings, and no one knew his occasional deviations from this rule, nor his skilful interposition of remoter affinities, when he saw, or apprehended danger.

But what has now become of the New Leicester or Bakewell cattle? where are they, to be found? It was a bold and successful experiment, and seemed for a while to answer the most sanguine expectations of that skilful and spirited breeder.

In districts, in which experiments were carried, on, its established a breed of cattle equalled by few; and it enabled the Long Horns to contend, and often successfully, with the heaviest and best of the middle, horns. But no sooner had the master spirits of the day disappeared, than the character of the breed began imperceptibly to change. It had acquired a delicacy of constitution inconsistent with common management and keep; and it began slowly but undeniably to deteriorate. Many of them had been bred to a degree of refinement, that the propagation of the species was not always certain. The breed itself gradually diminished; in some places it almost disappeared. The reader may scarcely give credit to the assertion, but it is strictly true, that in 1833 there was not a single improved Leicester on the Dishley farm; nor a dozen within the circuit of as many miles. It would seem as if some strange convulsion of nature, or some murderous pestilence, had suddenly swept away the whole of this valuable breed.

The above remarks are in substance taken from that valuable treaties on British cattle, before alluded to. In Kentucky, though the principle of breeding *in and in* has met with general disapprobation, yet, it has been more or less practised by many breeders. To one of whom allusion will be made, not from unkindness, but merely for example; for he like Mr. Bakewell of England, is a monument to illustrate the impropriety of the practice. This breeder, (now less notorious) had, several years since, one of the finest herds of milking and breeding blooded cattle in Kentucky, and deservedly had high reputation as a breeder. But vainly imagining that they were far superior to all others, proper crossing was neglected; the stock began to diminish in size; many of them became hornless; and their constitutions were impaired, in consequence of which they suffered more from cold in winter and were more liable to disease, in summer; the murrain soon got among them, and played such sad havoc in one short season, that at present, only a few venerable animals remain, of that once superior but illfated herd.

With this short digression we will again quote our valuable author. "It has therefore become a kind of principle with the agriculturist to affect a change in his stock every second or third year; and that change is most conveniently effected by introducing a new bull. This bull should be as nearly as possible of the same sort; coming from a similar pasturage and climate; but possessing no relationship,—or at most a very distant one not related to the stock to which he is introduced. He should bring with him every good point which the breeder has labored hard to produce in his stock, and if possible some improvement; and especially where the old stock may have been somewhat deficient; and most certainly he should have no manifest defect of form, and that most essential of all qualifications, a hardy constitution should not be wanting."

R. W. S.

CHOKED CATTLE.—For effectual and immediate relief in such cases, an anonymous writer recommends the use of gunpowder.—It is administered in the form of a common catridge, and introduced into the throat of the animal with the hand, his head being raised so as to prevent his throwing it out; when the choking substance will forthwith be ejected. Try it.—*Windham Co. Dem.*

This is the year for the re-appearance of the "seven year locusts," their last appearance having been in 1831.

From the London Farmer's Magazine.

JERUSALEM ARTICHOKES.

"I was determined to prove whether or not they could be cultivated to greater advantage than the potatoe, as *food for cattle.* One sack was consumed by a young calf at hand; it eat them with avidity and improved on them. I took the other two sacks and planted them in the midst of a five acre piece of potatoes. I set them without cutting,—measuring correctly an eighth part of an acre; the produce was in proportion to 630 bushels per acre,—the potatoes 327 bushels. The following year, the memorable one of 1836, I planted half an acre on a piece of thin gravel old tillage land, in its regular course of preparation for a vegetable crop after wheat; they maintained their verdure through that extraordinary dry summer, and produced one hundred and fifty bushels; but the potatoes by the side of them were completely set fast; they never formed a bulb. The year following I set an acre on part of the same kind of soil, but of better quality; it produced 570 bushels, *without any dung.* An half acre on the same land, with the usual quantity of dung for turnips, produced 290 bushels (a bad compensation for 8 loads of excellent dung.) This present season, an acre on the same land (part of my turnip fallow) produced 576 bushels, but the wet state of the soil when taken up, and being a vegetable of uneven surface, which causes the dirt to adhere to it more than to a potatoe, renders it difficult to come at the exact quantity. From an experiment I made of washing a sack, I can safely assert, I have 530 bushels of clean roots; whilst the vegetables on our flat gravels do not equal this by full 50 per cent in value, except the potatoe, which produced 308 bushels on the same soil. I never could raise more in favorable seasons.

"The cultivation of the artichoke is the same as of the potatoe, except that it requires to be set early—not later than March, if laid above ground all winter it is proof against the severest frost. When once cleaned, no weed can live in its dense shade; horses, beasts and sheep consume it with the greatest avidity; pigs prefer a potatoe to it in its raw state, but prefer the artichoke when boiled or steamed. It attracts the game in a most extraordinary way; they resort to its shade in autumn; it forms one of the finest covers in nature.—We are so fortunate as to have but little game in our lordships; I do not recollect ever having seen even a Sweedish turnip bitten by a hare or rabbit, notwithstanding they will consume the artichoke left by men in securing them.

"If potatoes can be profitably cultivated as food for cattle, compared with Swedish turnips, mangelwurtzel, the sugar beet, &c. (which I much doubt,) the artichoke is vastly superior to them. The expense of the culture is no more; it is not liable to be injured by frost, can be taken up at pleasure, it produces at least 30 per cent. more, and on poor land full 20 per cent., *is far more nutritious*, and leaves the land perfectly clean. The only objection that can be urged against their cultivation for cattle in competition with potatoes, is, that they require more care in taking them up. The frost not acting upon them so as to destroy vegetation, what are missed, will, of course, grow among the succeeding crop, but I have found very little inconvenience in this respect."

PLOUGHING GRASS LAND.

When it is desired to break up a grass pasture and sow it in corn, a plough is graduated merely to cut the sod, say two inches, or at most three; another plough follows immediately after in the same furrow, penetrating four or five inches and throwing the fresh mould on top of the sod which has been turned over; again, a third plough following in the same furrow, still throws two or three inches more of mould on the whole, which in all is a ploughing to the depth of from nine to twelve inches. Thus the sod lies out of the way of the plough or the hoe in the after culture, and is there left undisturbed to rot and manure the soil; the decomposition of which, evolving gasses and generating heat, greatly promotes the growth of the crop.—The depth and number of ploughings, whether nine or twelve inches, or two or three times, must be governed by the character of the soil, whether deep or thin; and again by its peculiarity, whether more or less calcarious or argillacious. If the clay underlying the vegetable or calcarious earths on the surface is known to possess fertilizing properties, a small portion of it may be advantageously turned up. But those clays which are cold and impermeable or which are not rendered friable on exposure to the atmosphere, should be allowed to remain where nature placed them. But our clay is generally fertilizing and a small quantity mixed with the soil will prove useful; owing to the calcarious matter or disintegrated limestone with which it is charged.—*Franklin Farmer.*

ROTATION OF CROPS.

The following principles are laid down by Chaptal for a rotation of crops:

I. All plants exhaust the soil. They are partially supported by the earth, the juices from which constitute an important part of their nourishment.

II. All plants do not exhaust the soil equally. Air and water help to nourish them; different kinds of plants require the same nourishment in different degrees.

III. Plants of different kinds do not exhaust the soil in the same manner. Plants with spindled or tap roots, draw nourishment from layers of soil in contact with the lower part of the root; while those whose roots are spread near the surface, exhaust only that part of the soil.

IV. All plants do not restore to the soil either the same quantity or the same quality of manure. The grains exhaust a soil the most, and repair the injury the least. While some leguminous plants restore to the soil a great portion of the juices they receive from it.

V. All plants do not foul the soil equally. —Plants are said to foul the soil when they promote or permit the growth of weeds. Plants which have not large leaves fitted to cover the ground, foul the soil.

From the above principles the following conclusions have been drawn.

1. That however well prepared a soil may be, it cannot nurish a long succession of crops without becoming exhausted,

2. Each harvest improverishes the soil to a certain extent, depending upon the degree of nourishment which it restores to the earth.

3. The cultivation of spindle or tap roots, ought to succeed that of running and superficial roots.

4. It is necessary to avoid returning too soon, to the cultivation of the same, or analogous kinds of vegetables, in the same soil.

4. It is unwise to allow two kinds of plants, which admit of the ready growth of weeds among them, to be raised in succession.

6. Those plants that derive their principal support from the soil, should not be sown excepting when the soil is sufficiently provided with manure.

7. When the soil exhibits symptoms of exhaustion, from successive harvests, the cultivation of those plants which restore most to the soil, should be resorted to.

Prospectus of a process for obtaining cheap and valuable Manure, without the aid of Cattle, invented by M. Jauffret, of Aix.

"A method has been discovered in France, of making manure as it may be wanted, without cattle, in twelve days, and with great economy, as appears from a report made to the committee of the Academy of Agriculture at Paris, by M. Cailleau, president of that committee. M. de la Gerandire, president of the Academy of Agriculture of Blois, and the Marquis de Saint Croix, were appointed to examine into the merits of M. Jauffret's invention.

"These gentlemen report "that by a cheap wash or lye, the ingredients of which are to be found in all places, and which every cultivator can make on his own land, all sorts of herbaceous and ligneous substances, such as heather, furze, brambles, and even the living dogstooth, can be put into a state of rapid fermentation, and not only these substances, but even earth itself, be its nature what it may, can be converted into a valuable manure.

"That the manure produced by this new system, is quite as valuable as the best horse-litter; its effects are visible upon several successive crops, and it can be obtained with perfect facility, at pleasure."

The above may be justy regarded as one of the most magnificent discoveries of the age—provided always, that it does not turn out to be a humbug. As, however, the decomposition of all compound material substances—more particularly in the vegetable kingdom—is an every-day, but ordinarily gradual, operation of nature, we can perceive no reason why the process may not be accelerated or even at once accomplished by the application of the requisite chemical agents. With the many wonderful discoveries of the day in our memory, we are prepared to believe in almost any exploit, however apparently miraculous, which Science may claim to have achieved.

Ed. Tenn. Farmer.

EDUCATION.—"You will confer," says Epictetus, "the greatest benefit on your city, not by raising the roofs, but by exalting the souls of your fellow citizens, for it is better that souls should live in small habitations, than that ignorant men should burrow in great houses."

TENNESSEE FARMER.

Jonesborough, June 1, 1838.

Our readers will perceive the change which occurs with the present number in the publication of this work. It is, however, "a *change* which is not all a *change*." It involves no change of editorship since the commencement of the current volume; nor any abandonment of the principles or objects of the work; and, least of all, will it bring with it any diminution of that sincere zeal with which we endeavor to promote the great interest to which our little sheet is devoted.

The occasion affords us an opportunity briefly to urge the claims of the cause in general, and of this work in particular, upon the notice and the patronage of the public.

There are none who do not nominally admit that agriculture is the great elemental interest in our broad country upon which all others are directly dependant. Unlike many other branches of the useful arts, it is not a mere incidental pursuit—the off-spring of a conventional necessity; nor is it convertible and fluctuating in its uses as the caprices of fashion or the changes of manners and customs may stimulate or depress it. On the contrary, it is vital—indispensable and permanent as the ever renewed and inevitable necessities of man. Strike it from the catalogue of human avocations, and we revert immediately to the savage state with the bow and the rifle as the means of subsistence—or the net and the harpoon of the fisherman—or the wild and bandit rapine of the Arab—or probably the cannibal war and loathsome resort of the degraded African. Not only is it the most pleasurable pursuit—the most innocent and charming amusement of individual life—not only the strongest citadel of pure morality and love of country, and all the social virtues—but it is also the great ever-gushing, and exhaustless fountain of national wealth, independence and prosperity.

If then it is *the* great interest, why is it not more cherished by government and people? Why does the man of the world turn up his fastidious nose at the employments of the farmer? And the politician—the official breath of whose nostrils is in the hands of the farmers of the land—why does he attach a higher importance to the minutest details of party intrigue, than all the wide agricultural interest he is selected to subserve? And even the farmer, himself, why does he, in many instances, regard with indifference or spurn with contempt the effort to advocate and advance his interests, and prefer to occupy his leisure time with all the filth of political party strife, rather than store his mind with the useful agricultural knowledge which would fit him for the duties of his calling, and add alike to his wealth and his respectability? And the periodical press—why does it devote so little of its acknowledged power in building up and sustaining this great public interest, and worse than uselessly waste so much of its energy in gladiatorial exhibitions of its dexterity at abuse and detraction.

These are questions, we were going to say, difficult to answer—but they are not.—The broad page of history is full of the truth that men have ever been blind to their best interests; and that the indulgence of bad passions and vitiated tastes, has always been preferred to the more useful, virtuous and really honorable avocations of human life.

As, however, the lights of civilization and science are blessing our age and country, with so much of their increasing effulgence, we are induced to hope that this state of things may be changed, or, at least, greatly ameliorated; and we think all good men will unite with us in our ardent desire to witness an improvement of public sentiment on this subject. We wish to see the whole body of the people inoculated with a juster sense of the importance, the dignity and the pure pleasures of agricultural life. We wish to see the farmer himself, lay hold of the great work with no unskilful and incompetent hand, well informed of, and adequate to the duties of his calling, adorning the responsible station he occupies, and by his example, inviting

more of the capital and the enterprize, and the intelligence of the land into our ranks. We wish to see the claims of agriculture upon the patronage of government, (claims from the justice of which she can never escape,) distinctly recognized and judiciously and generously acted on. And, finally, as an humble but zealous agent, to co-operate in the production of these salutary results, we should, certainly, feel no reluctance to see our little sheet, the Tennessee Farmer, more extensively patronized, and more widely useful than it can be with its present circulation.

And here we should perhaps be ungrateful not to say, that, however much we may lament the apathy of that numerous class, who seem to care nothing at all for the agricultural improvement of the country, we nevertheless have no right to complain, in our own case, of the public feeling in relation to this work. The indications of a general good disposition towards it, have been most manifest; our subscription list, with no special effort on our part, has steadily increased since the commencement of the year; and many individuals have manifested an active, and to us most gratifying, interest in its success. But its circulation, after all, is *comparatively* limited; and its friends are requested still to continue their aid in extending it.

We shall, also, forward this number to persons who are not subscribers, with the respectful request that they will each add what names they can to our subscription list. Persons procuring ten subscribers, and annually remitting their payments, are allowed the 11th copy gratis.

We have also renewed our exchanges, which had been somewhat irregular of late, with the periodical press in *this State*—to whose favorable notice and expressed good wishes heretofore, this work has been much indebted.

THE GRAZING SYSTEM IN MIDDLE TENNESSEE.—We incidentally adverted, in our last number, to the opinion which we believed to be somewhat prevalent in Middle Tennessee, that the time was not distant, when the culture of cotton would be abandoned, and grazing and stock-raising take its place in that section of the State. There is one aspect of this subject which is full of interest. It is well known that owing to the varying interests of the different divisions of our State—the result, mainly, of the great difference in their several staples—sectional jealousies have frequently arisen, threatening the harmony and impeding the action of our Legislative councils. It could scarcely be expected to be otherwise; and it has only happened, through a most commendable spirit of mutual concession and courtesy, that so little of the evil effects, to be dreaded from such a state of things, has resulted.

Now, if our brethren of Middle Tennessee should find it their interest to give up cotton and resort to grain-growing and stock-raising, the agricultural interests of that section and of East Tennessee would then be identical; and when we remember the Western District, as it was when we saw it in the early settlement of that region, with its luxuriant natural grasses, covering the whole face of the country like a rich Kentucky woodland pasture, we can scarcely doubt that this division of the State would also accede to a system, which would then unite our whole State in the bonds of a common interest, feeling and policy. The political and social results of such a revolution all must appreciate; but our fellow-citizens of Middle Tennessee will, of course, be the best judges of the immediate advantages resulting to them, from such a change of their staples. We cannot, however, forbear the expression of our coincidence, with the opinion of some of her most intelligent citizens, that she would be greatly benefitted by the change—that the abandonment of a staple, to say the least of it, of doubtful adaptation to her climate, and annually deteriorating her fine soil, and the adoption of a system which can scarcely fail of its ultimate profits and permanent advanta-

ges to the soil, would seem to be the dictate alike of policy and of patriotism.

We have always regarded the grazing system, as the most fascinating of all the various branches of agricultural life. It is a partial renewal of the pastoral simplicity, and abundance of the patriarchal ages; or a verification of the Arcadian dreams of the ancients. The grazier incurs comparatively little of the vexation and solicitude, and heavy expenses, and frequent losses, always attendant upon the numerous and unwieldy establishment, necessary in the large cotton or tobacco crop. A few hands suffice to manage his farm and conduct its operations; for his wide pastures renew their annual crops of luxuriant grass, without the toilsome intervention of the plough and harrow, or the ever-recurring labors of seed-time and harvest. His sleek herds enjoying the unrestrained liberty, grateful alike to the rational and irrational animal, provide their own daily food, with little or no draft upon his time or labor or solicitude. His land does not deteriorate. The few acres he cultivates, he has time to cultivate well, and they yield a nett profit, which, perhaps, the large, laborious, and hurried crop of the planter, has failed, in the end, to obtain. He has time, also, to keep his farm in good order; his high fences guard his fields from all intrusion; nor does the intrusive weed and noxious bramble long infest his grounds, and become the substitutes of his crops. All the minor comforts and pleasures of country life are his; and, not to protract this picture, we might add, that the very breath of an atmosphere extracting odours and heathfulness from the freshness of such a scene—the verdure of the landscape always so grateful to the eye—the social presence of the numerous innocent domestic animals, and the repose and quiet of the whole scene, cause nature to put on the loveliest robes of her native beauty, and warrant the belief, that this virtuously, voluptuous and primitive system involves the very perfection of agricultural life.

But the poetry of the system is, by no means, its only recommendation. A glance at the prosperous condition of the Kentucky grazier, is sufficient to satisfy the most incredulous, that it is one of the most profitable and money-making of all the various branches of husbandry. It must of necessity be so where nature has provided the way for its succesful adoption; and if our fellow-citizens of Middle Tennessee are satisfied that such is the case with their soil and climate, they certainly would not make an *unprofitable* exchange to substitute it for the cotton culture. Of the relative comforts and enjoyments of the two systems we humbly conceive that there can be no comparison.

POPULAR EDUCATION.

We have received, through the politeness of our Superintendant of Public Instruction, a copy of the act to establish a system of Common Schools in this State, passed January 4th, 1838. We regard it as a highly important and most praiseworthy measure—not so much, however, on account of its own intrinsic efficiency, but as another decisive and onward step in the progress of our State Legislation on this vastly important subject, which we, earnestly, hope will yet eventuate in a still more perfect consummation. The system embraced in this act is no doubt ably devised and highly judicious in its details; but the funds set apart to carry it into operation, will be inadequate to sustain it but in part—the act itself, contemplating such a deficit, and providing, through the Rate Bill, for a full support of the teachers, by a proportional tax upon those who derive benefit from the schools. No doubt, however, that great good will result by providing additional aid in the support of schools, and stimulating to their organization in districts where they have not been heretofore upheld. And if our people would avail themselves of the opportunity now offered them, with but a tithe of the zeal they *should* feel in such a cause, there need not be a youth in all the State to grow up in unavoidable ignorance.

The free school system in the U. States, although in some parts of the country it has

attained a considerable maturity, yet does not still compare with the perfection to which it has been carried by other governments less needing its benefits, and acting under far less favorable circumstances than ours. It is indeed a remarkable fact, that the two countries which have carried the principles of general education, to the highest standard of practical perfection to be found on earth, are Prussia, a despotic monarchy, and Iceland almost utterly cut off, by her location, from intercourse with the civilized world. In the latter country, imbedded as she is amid her eternal ice, and with her casual glimpses of sunshine, the children are educated almost without exception, and even at the ages of 9 and 10, become familiar with the Latin and Greek languages. The former State also has a system in active operation, which aims at and accomplishes universal education within her limits. Her entire youthful population between the ages of 7 and 14 are in her elementary schools. The number of these schools in 1833, was nearly 22000—the teachers in actual service, not quite 25000. But, perhaps, the most important feature in this system, is the 42 seminaries, for the education of teachers, which every year turn out 8 or 900 qualified instructors.

Prussia, however, is by no means a solitary European example of this zeal in the cause of education. The same spirit seems to be abroad, and producing like results throughout the civilized world. Stimulated by her example the kingdoms of Bavaria and Wirtemberg and the grand Dutchy of Baden have organized systems of free schools which already rival that of Prussia. Several of the smaller German States and even priest-ridden Austria are emulating the same example.—"The Autocrat of all the Russias" has instituted a complete system of common school instruction for the entire population of that immense empire, which is going into operation as rapidly as it is possible to procure the competent teachers. England—which is said to have hitherto neglected common school education more than any other protestant country in Europe—France, Spain and Italy are all waking up to active measures of reform in this branch of national policy, and the same searching spirit seems even to have invaded the benighted empire of paganism.—The Sultan of Turkey and the Pacha of Egypt are both devising means to procure instruction for their people.

It can now no longer be said that the monarchies of Europe are excluding their subjects from the lights of knowledge and education. The reverse of this picture, under which we have been so long accustomed to look upon the despotisms of the old world, is now no less true than strange—and no less strange than cheering.

The honor of stimulating to these astonishing results has been awarded (and we presume deservedly) to the example of these United States. Ever since the era of our revolution, the principles of popular rights and popular education have been steadily operating throughout the civilized world.—The despots of Europe have perceived the resistless tendencies of this spirit, and knowing full well, that *this* "wild wave" would

"contemn the sceptred hand"

have very judiciously foreborne to stem the current, but now strive to use and divert it to their own purposes. Accordingly it is a leading principle of the Prussian system of education to inculcate upon the youthful population, in the course of instruction, a strong affection for their own political institutions—a deep and abiding love for their native soil and country. There is wisdom in this whole policy—such as might have been expected from the wary statesman of the 19th century.

We have noticed these interesting facts, with which we are made acquainted by recent intelligent travellers in Europe, to demonstrate the necessity that we should adopt yet more decisive measures for the education of our entire population. Shall the freemen of this Republic grow up inferior in intellectual culture to the Russian boor and the Austrian serf whom we have hitherto so much despised? Shall our government which purports to rest, for its security upon the intel-

ligence of the people, manifest less zeal, in promoting general education, than the despotic States of the old world, whose malignant opposition to the diffusion of knowledge has been the annual theme of our fourth of July oratory for a long series of years? We hope not. As the tendencies of our Republican institutions obviously look to, and urgently demand, universal education, we earnestly hope that the day is not distant when we shall exemplify our consistency, by, efficiently, adding alike to the strength and the embellishment of this essential pillar in the fabric of our civil liberties.

BEAVER OF NORTH AMERICA. The natural habits of the Beaver are topics so generally, though often so imperfectly handled, that we will rather speak at present of the manners which it is found to display in a domestic state, and of one or two other particulars less generally known.

We have domesticated certain animals, and most of these only to a certain extent, and are therefore apt to fancy that those are the only animals susceptible of domestication, and that they surpass all others in sagacity and commpanionable affections. But there is a very long list indeed, of animals, apparently the last to be thought of, for domestication, but which, nevetheless, would please, and be pleased, if they, like others, lay in our bosoms, ate out of our dish, and sat at our fire-sides, and that would make manifest their understanding, and more than answer our caresses. An example presents itself in the Beaver, whose habits in domesticity are pictured by a North American trader.

"I have kept several Beavers," says Hearne, "till they became so domesticated as to answer to their name, and to follow those to whom they are accustomed, in the same manner as a dog would do, and they were as much pleased at being fondled as any animal I ever saw. In cold weather they were the constant companions of the Indian women and children, and were so so fond of their company, that when the Indians were absent for any considerable time, the Beavers discovered great signs of uneasiness; and, on their return, showed equal marks of pleasure, by fondling them, crawling into their laps, lying on their backs, sitting like a squirrel, and behaving like children who see their parents but seldom. In general, during the winter, they lived on the same food as the women did, and were remarkably fond of rice and plum-pudding: they would eat patridges and fresh venison very freely, but I never tried them with fish, though I have heard that they will at times prey on them. In fact, there are few grammivorous annimals that may not be brought to be carnivorous."

Of the things *usually* eaten by the Beaver, the same writer gives the following account:—"Their food consists of a large root, something resembling a cabbage stalk which grows at the bottom of the lakes and rivers. They also eat the bark of trees, particularly those of the poplar, birch, and willow; but the ice preventing them from getting to the land in the winter, they have not any bark to feed on in that season, except that of such sticks as they cut down in summer, and throw into the water opposite the doors of their houses; and as they generally eat a great deal, the roots above mentioned constitute a principal part of their food during the winter. In summer they vary their diet, by eating different kinds of herbage, and such berries as grow near their haunts."

Beavers having returned in considerable numbers to Nottaway river and its tributaries, Mr. Ruffin of the Farmer's Register, suggests the propriety of an experiment to domesticate them, with a view to the annual procurance of their rich furs, without destroying their lives. As this inoffensive and valuable animal is rapidly disappearing before the stratagems of the trapper, and the march of civilization, this resort may become necessary if practicable, and might perhaps turn out to be a profitable enterprise.

ED. TENN. FARMER.

THE DIFFERENCE BETWEEN LONG-TAILED AND SHORT-TAILED HORSES. The following singular advertisement was painted in large letters on a board, placed on the side of a field, in the neighborhood of Greenwich, Eng

"Good grass for horses. Long tails, three shillings and sixpence per week; short tails, two shillings and sixpence per week." The difference in the charge was made because the *long tails* can whisk off the flies, and eat at their leisure, while the short tails are running about from morning till night.

What is the best of all things? Virtue because without it there is nothing good.

AGRICULTURE.—To solicit his mother earth for life's sustenance by the wholesome process of tillage, has ever been most natural and honorable occupation of man. The great Creator has designated the earth, not only as the common receptacle of the mouldering bones and decayed forms of human kind, but also as their common source of aliment and support whilst the vital current continues to flow. And, as the pursuit of agriculture is the most universal and natural employment of our race, so it is the most rich in moral fruits, and more than any other avocation, leads to a desirable innocence and simplicity of life. Its rural scenery, "the pomp of groves, the garniture of fields, all that the genial ray of morning gilds, all that echoes to the song of even, and all the dread magnificence of heaven," are so many sublime incentives to adoration and gratitude.

The season of the year has now arrived when the busy operations of husbandry are going on.

'When first young zephyr melts the mountain snow,
And spring unbinds the mellowing mould below,
Press the deep plough, and urge the groaning team,
Where the worn shares, in opening furrows gleam.'

The true secret of Agriculture, as Cato has long since taught us, is to *"feed well."*—The neglect of this rule will be fatal to all success, in the matter, will bring disappointments instead of harvests, and poverty instead of abundance. It will be found universally, that husbandry may be pronounced good or bad according to the observance or disregard of this rule. Let the faithful beasts of burden be consigned to leanness, let the lowing herds pine away for want of sufficient pasturage, let all the creatures for man's use be left in meagre, ill-fed forms, and no great penetration will be requisite to portray the character of such husbandry. But reverse the picture, and the most captious and fastidious taste would admit the merit of the management that could so bless and beautify the beasts of the fields.—*Northampton Farmer.*

Floriculture is paticularly calculated for the amusement of youth. It may teach them many important lessons. Let a piece of ground be appropriated to their use—to improve in such a manner as their inclinations shall dictate—to cultivate such plants as are pleasing to their taste; and let them receive the proceeds. Let order and neatness pervade their little plantations. Let them be instructed, that nothing valuable is to be obtained or preserved without labor, care, and attention—that as every valuable plant must be defended, and every noxious weed removed, so every moral virtue must be protected, and every corrupt passion and propensity subdued.

The cultivation of flowers is an appropriate amusement for young ladies. It teaches neatness, cultivates a correct taste, and furnishes the mind with many pleasing ideas. Their delicate forms and features, their mildness and sympathy of disposition, render them fit subjects to raise those transcendent beauties of nature, which declare the "perfections of the Creator's power." The splendid lustre and variegated hues (which bid defiance to the pencil) of the rose, the lily, the tulip, and thousands others, harmonize with the fair, fostering hands that tend them with the heart susceptible to the noblest impressions—and with spotless innocence. [T. G. Fessenden.

A MULBERRY PLANTATON.

In the selection of a site for a mulberry plantation, the following considerations should be strictly observed:

1. The soil should be *sandy, gravelly,* or a *light loam,* with a loose subsoil in either case—*because* these are the soils that the mulberry delights in.

2. The situation should be high and dry, with a southern exposure—*because,* first, high situations are less affected by the frost, there being a difference of about 14 degrees between the temperature of elevated and *very low* situations—and secondly, *because* vegetation is earlies on a southern exposure than on any other, and the mulberry planted thereon would afford foliage two weeks earlier than on others.

3. The mulberry orchards would be best if protected by a woods on the *north* and *west:* should there be no woods, a hedge of white mulberry might be raised in a few years, with but little trouble; and this in addition to keeping off the piercing winds of winter, would afford considerable foliage for feeding the worms.

4. The *water* should be *soft,* such as promptly yields a rich lather in the operation of washing, as without the water is soft, the cocoons do not wind off well. Water impregnated with iron or limestone is particularly unfavorable to the operation of reeling.—*Farmer & Gardener.*

For *toothache,* wash the back part of the head and neck every morning with cold water.

HARVESTING WHEAT.

Wheat, if harvested too early, will lose in weight very considerably, though the flour produced from it will be of a superior quality. If allowed to stand too long, there is danger of loss from its shelling freely in cutting and carting, and though more flour is made, it has not the pure whiteness of earlier cut grain. In order to avoid the loss by shrinkage on one hand, and shelling on the other, it becomes of considerable consequence to determine the most advantageous period of cutting wheat. That wheat should be allowed to stand until the berry will be mature, there can be no doubt. After this time, all is unnecessary danger in exposure. The white flint is a wheat, which in the field, resists two causes of danger and loss better than any variety with which we are acquainted;—it rarely germinates on the stalk while standing, as some other kinds will, in unfavorable weather; and owing to the firmness with which the kernel is embraced by the chaff, the loss by premature shelling, is inconsiderable.

Brown in his treatise of Rural Economy, an excellent English publication, says,—"It is necessary to discriminate between the ripeness of the straw, and the ripeness of the grain; for in some seasons the straw dries upwards; under which circumstance, a field to the eye, may appear completely fit for the sickle, when, in reality the grain is imperfectly consolidated, and in fact not much removed from a milky state." We have seen wheat in this state, cut, and when put immediately in a mow or stacked, it can hardly fail of receiving injury. Such grain, though it can receive no benefit from the root by standing, is materially aided in ripening by the action of the air and the sun. Mr. Shirret in the Quarterly Jour. of Ag. gives as reasons for cutting wheat before it is dead ripe, that is when the straw begins to turn, or is turned yellow immediately below the ear;—first, an increased quantity of grain; greater security from the weather; an improved quality of straw: and an extension of the harvest season.—Secondly, greater security against the effects of wind or rain, either as it effects the shelling, discoloration, or germination of the grain. The color of wheat which was not cut till it became dead ripe is generally of an opaque whitish hue; while that which was cut before it was dead ripe is transparent and tinged with brown. The latter description of wheat bears the highest price in all markets. Where, however, wheat is smutty, it should be allowed to stand as long as it can do so with safety, as much of that fungus will be lost in the field, and the remainder more easily broken to pieces, and blown away in the process of threshing and cleaning. It may be however considered as a general rule, and one which is sanctioned by the practice of the most skilful farmers in this country and abroad, that it is better to cut wheat early than late, and that there is less danger from loss by shrinking than from shelling.

The time necessary for wheat to remain in the field after it is cut, before it is put in the barn or stacked, must in a great measure depend on two circumstances; the ripeness of the grain when cut, and its freedom from every thing green when bound into sheaves. If the grain is perfectly ripe, and the straw thoroughly dried, and the sheaves free from grass or weeds, wheat may be cut, and stacked or housed the same day; but as these conditions are rarely found united, and nothing is more fatal to the quality of wheat than heating and moulding in the mow or stack, it is usually better to let the wheat be effectually cured in the field than run any risque from premature housing. The best method of securing it from suddden showers, or unfavorable weather while left in the field, now becomes a question of interest to the farmer. He well knows that if a sheaf of wheat or other grain is once thoroughly soaked, it takes it a long while to dry; and though a slight wetting of the heads, or butts of a sheaf, will soon pass away by evaporation and exposure to the air, yet water in the centre of the sheaf where the straw is compressed by the hands, requires many days of fair weather for its dissipation. Various methods are adopted by farmers to save their grain from wetting. Some lay it in the form of a cross, the heads in the centre, and the whole surmounted with a sheaf so disposed as to throw off any slight showers that may fall. Others place their wheat in shocks, the sheaves two and two, standing on their butts, the heads of the sheaves inclined to each other, and the tops covered by two sheaves laid their butts to each other, and the taps spread out so as to shield the standing wheat as much as possible. Others place their wheat in the same position as the last, with the exception that all of the shock is left standing, and no sheaves are placed over the heads. In fine weather this method is perferable to any other, as the wheat is more exposed to the influences of the air and sun, and is consequently sooner fit for the barn. It will even stand through a shower not too severe, in

this way, with little injury, if followed by sun and clear air; but it is evident that heavy or long continued rain by the thorough soaking the sheaves must receive, can scarcely be otherwise than prejudicial to the quality of the wheat; and it is by getting in wheat before the centre of the sheaf is dry after wetting, that more wheat is injured in this country than in any other way. Another, and perhaps all things considered, the safest way of all, is to put up the wheat the day it is cut, and if rain is apprehended as fast as it is cut and collected, into stacks containing from eight to ten shocks each, the sheaves built in compact with their heads to the middle, and the butts declining outwards, and the stack topped with a sheaf so arranged as to cover the cone of heads, and throw off the rain in every direction. Wheat so put up, and well managed, may stand for weeks without injury and wait the pleasure of the owner for gathering to the barn; and the green stuff with which the butts may be filled, will be effectually dried, and thus prevented injuring the wheat, which it would have done had it been housed before curing. Experience here however is the surest guide as the seasons differ in different places, and what may be followed in one place with safety might be ruinous in another. Thus in northern latitudes far more care is required than in southern ones; and while the grain of the north of Europe can with difficulty be saved at all, nothing is more safe from injury by the weather, than the harvests of Spain and Italy, and the same remarks are true, though to a less extent, on this continent. It should however be remembered that experience here and abroad, shows that while other methods of securing *may* be safe, stacking in the field, when the stacks are properly put up, is certainly so, and should generally be followed for that reason.—*Gennessee Farmer.*

From the Farmer's Cabinet.

ON SOWING PARSNEP AND BEET SEED.—Two or three weeks before I commence digging up my garden in the spring, I tie up separately in a piece of cotton or linen rag, as many parsnep or beet seed as I wish to plant, and bury them in moist earth, either in my garden or a box or pot; I examine them occasionally, and when they begin to sprout I plant them; by this method I know every seed that will grow, and have no gaps in my rows; I also gain two or three weeks of my neighbors, who wait till they dig up their gardens and prepare their ground for planting.—Gardners, try it. J. B. C.

SOAKING CORN TO FEED HORSES.

A gentleman who resides in Baltimore county, and who is one of the most successful farmers in our vicinity, informed us a few days since, that he saved at least one-third of his corn by the manner in which he fed it out to his horses. His plan is this: He has two hogsheads placed in his cellar, where they are secure from freezing. These he first fills with corn in the ear, then pours in a sufficient quantity of water to cover the corn. After the ears have been thoroughly soaked he commences feeding, giving to his horses but two-thirds the usual quantity allowed. As one of these hogsheads becomes empty, he re-fills it; and by the time the other is empty the one last filled is ready for use. In this way, the cobs become so softened that the horses consume the whole of them, and they are thus made to add fully one-third more to his stock of feed. He assures me, that his horses eat the cobs with avidity, keep in good order, and are just as competent to perform plantation labor as when they consumed the grain alone. The success of our informant should stimulate his agricultural brethren to follow his example, as the labor of preparation is nothing, compared with the great saving effected.

Farm & Gard.

THE SILK BUSINESS.—There is at least one substantial objection against attempting to raise two generations of silk worms in a season, viz: that it tends to kill the trees.—If the mulberry will bear to be stripped of its leaves once, it will not bear to be served so repeatedly, in the same season; and if there is a sufficiency of trees for two crops of silk, it is best to double the number of worms in the first; for the young leaves of spring are better for young worms than the old leaves of summer. Leaves make roots as well as silk; they are necessary to the life of the tree, and unless the leaves perform their office to the roots, the roots will soon cease to perform their office to the leaves. There is a mutual dependence between them. We have seen from the parliamentary reports of Britain, that children there are made to perform, in factories, 12 to 16 hours labor in 24, no doubt to the profit of the owners, and we have seen that these poor children become diseased and ruined in their constitution, by reason of this violation of nature's laws—which ordain rest to the child, and leaves to the tree. Her laws cannot be violated with impunity, either in the vegetable or animal kingdom.—*Cultivator.*

Products of Essex County, Massachusetts.

The Rev. *Henry Colman*, Commisioner of the Agritultural Survey of the state of Massachusetts, gives the following in his first annual report, as the products of the following agricultural commodities, in Essex county of that state:

Wheat, 24, 25 and 32 bushels per acre.

Indian Corn, 70, 74, 84, 901-2 903-4, 105, 110, 1131-2, 115, 1171-4 bushels per acre.

Barley, 50, 511-2, 52, 54 bushels per acre

Rye, 40, 56 bushels per acre.

Oats, 1000 bushels on 20 acres, being 50 bushels per acre.

Potatoes, 400, 484, 5181-2 bushels per acre.

Carrots, 849, 864, 878, and 900 bushels per acre.

Mangold Wurtzel, 924 and 1240 bushels per acre, at 56 lbs. to the bushel.

Beets, 782 bushels to the acre.

Ruta Baga, 688, 903 bushels to the acre.

English Turnips, 636, 687, 672, 751, 814 bushels to the acre.

Onions, 651 bushels per acre.

From one acre of land upwards of 3 tons of well cured *Millet*.

From 1 acre of reclaimed meadow, 41-2 tons of English hay, were weighed and sold in 1836–7.

From 6 acres of land more than 29 tons of good English hay weighed at the town scales, have been cut in a season.

$600 worth of winter squashes were sold the last season from 2 acres of land. The market price very high.

The above are given as remarkable products in the county named, many of which were certified under oath to the Massachusetts and Essex Agricultural societies, and others came under the Rev. Mr. Colman's own observation, or rest upon testimony so well authenticated that it is difficult to reject it.

In looking at the respective products quoted, we were very sensibly struck with the great superiority of the husbandry of the Bay state to that of the middle and southern states; for nothing but superiority of culture can account for the great difference in yield, as the soil of Massachusetts is not *naturally* as good as that of most of the states within the described limits nor is her climate as well adapted to the production of many of the enumerated articles—of, perhaps, none except *oats* and *potatoes*.

This superiority of husbandry is however, easily accounted for. Massachusetts, in her wisdom and paternal care of the interests of agriculture, has very properly endowed agricultural societies having granted very liberal annual donations to each society in the state, and thus infused a spirit of emulation into the minds of her husbandmen. Not content with this, she grants special bounties upon particular products, and thus secures to herself the advantages of all the enterprise, skill and industry of her citizens which they are capable of exerting. She does, indeed, *realize* that proud principle of Republics—☞*that governments were instituted for the benefit of the people*.

How lamentable is the truth, that while many of her sisters are content to *profess* their *belief* in the beauty of this *theory*, and are satisfied to be mouth worshippers at the shrine of their idolatry, Massachusetts, with a nobleness of purpose that entitles her to the just and enviable meed of veneration and respect, carries out her principle, and illustrates *her belief*, by putting in *practice* what she professes—that intent upon advancing the permanent welfare of her citizens, she looks beyond that contracted policy,—which, in its miserly estimate of dollars and cents, restricts enterprise, retards the developement of genius, and manacles the nobler efforts of the mind—and that, by adopting a course as liberal as wise, she stimulates industry, awakens a spirit of generous rivalry, and by marshalling her citizens in the onward road of prosperity, secures to the State distinction and wealth.—*Farmer & Gardener.*

List of Payments to the Tennessee Farmer, from the 24th of April to the 16th of May, 1838.

F. H. Gordon 1; H. Truggle 1; B. Paris 1; G. M. Arnold 1; Col. J. Anderson 1; J. A. Petty 1; M. Kinnard 1; J. Park 1; C. H. Kinnard 1; S. Harriss 1; David Rise 1; Rev. J. King 3; W. Anderson 3; J. McLemore 1; A. J. Blackmore 1; B. Patterson 2; L. Bobo 1; B. McLaurine 1; D. Harrisson 1; Thos. Batte 1; G. A. Batte 1; G. Bowers 1; Col. J. McDowel 1; W. M. Carson 1; Col. E. D. Lewis 1, J. L. Carson 1; G. M. Carson 1; D. C. Johnston 1; J. Sampson 1; B. Philips 1; B. J. Jones 1; J. Berry 2; M. S. West 1; A. Wilds 1; T. S. Langley 1; J. Dawkins 1; J. G. Ross 2; M. D. Beardon 3.

ADDITIONAL AGENTS.

Col. James Long, P. M., Elkton, Tenn.

James Gunn, P. M., Red River, Robertson county, Tenn.

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